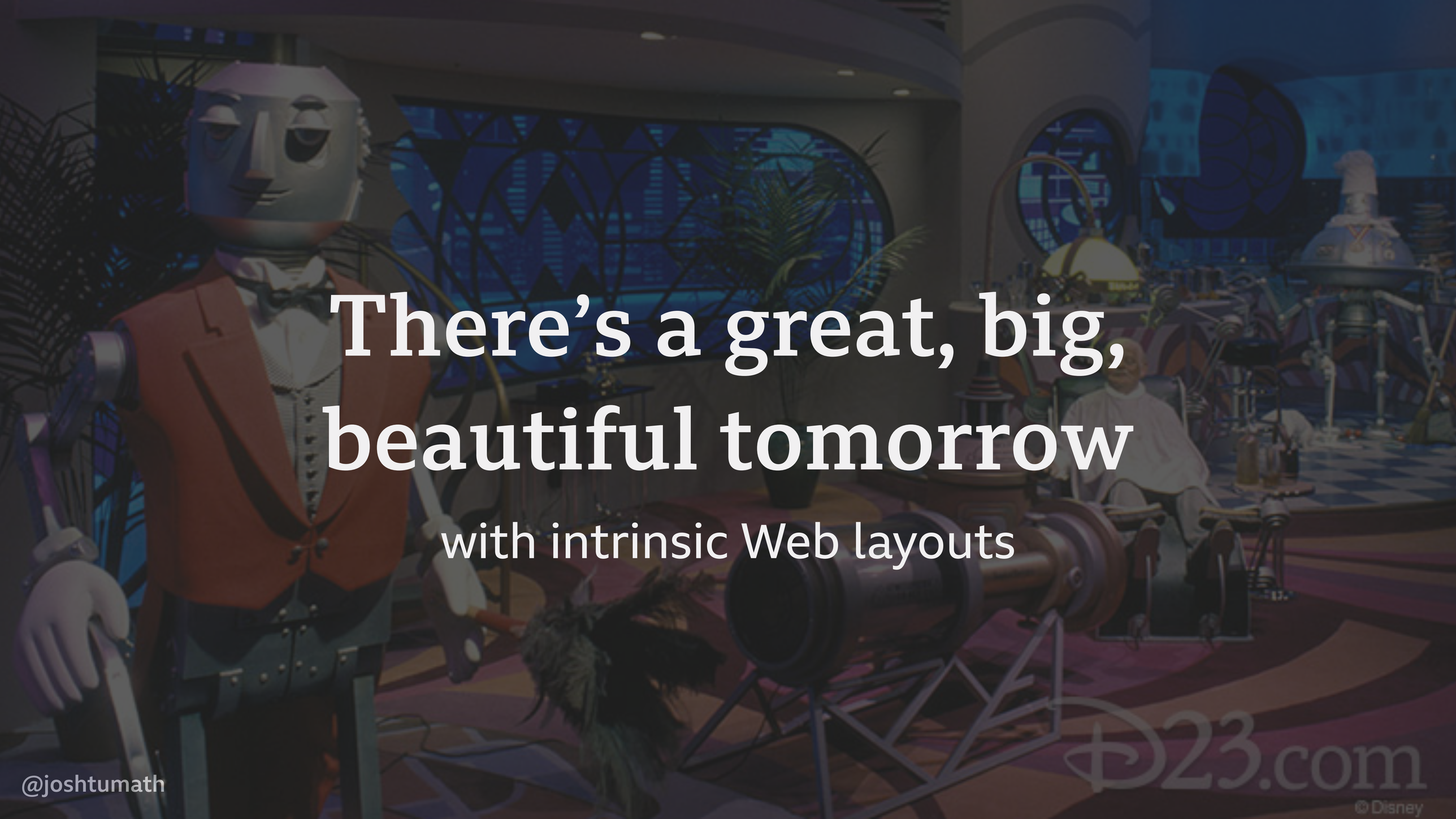

There’s a great, big, beautiful tomorrow
with intrinsic Web layouts
@joshtumath
D23.com
© Disney

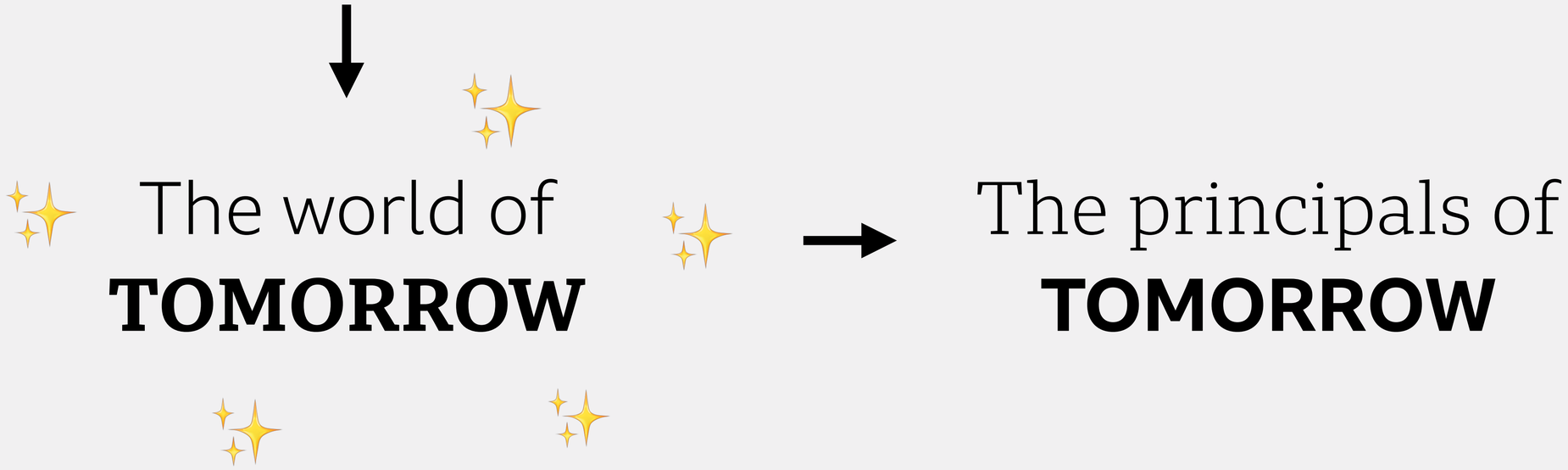
Josh Tumath

Front-End Web Developer

Presentation Layer, Core Services

@joshtumath

The world of
TODAY



The world of
TOMORROW

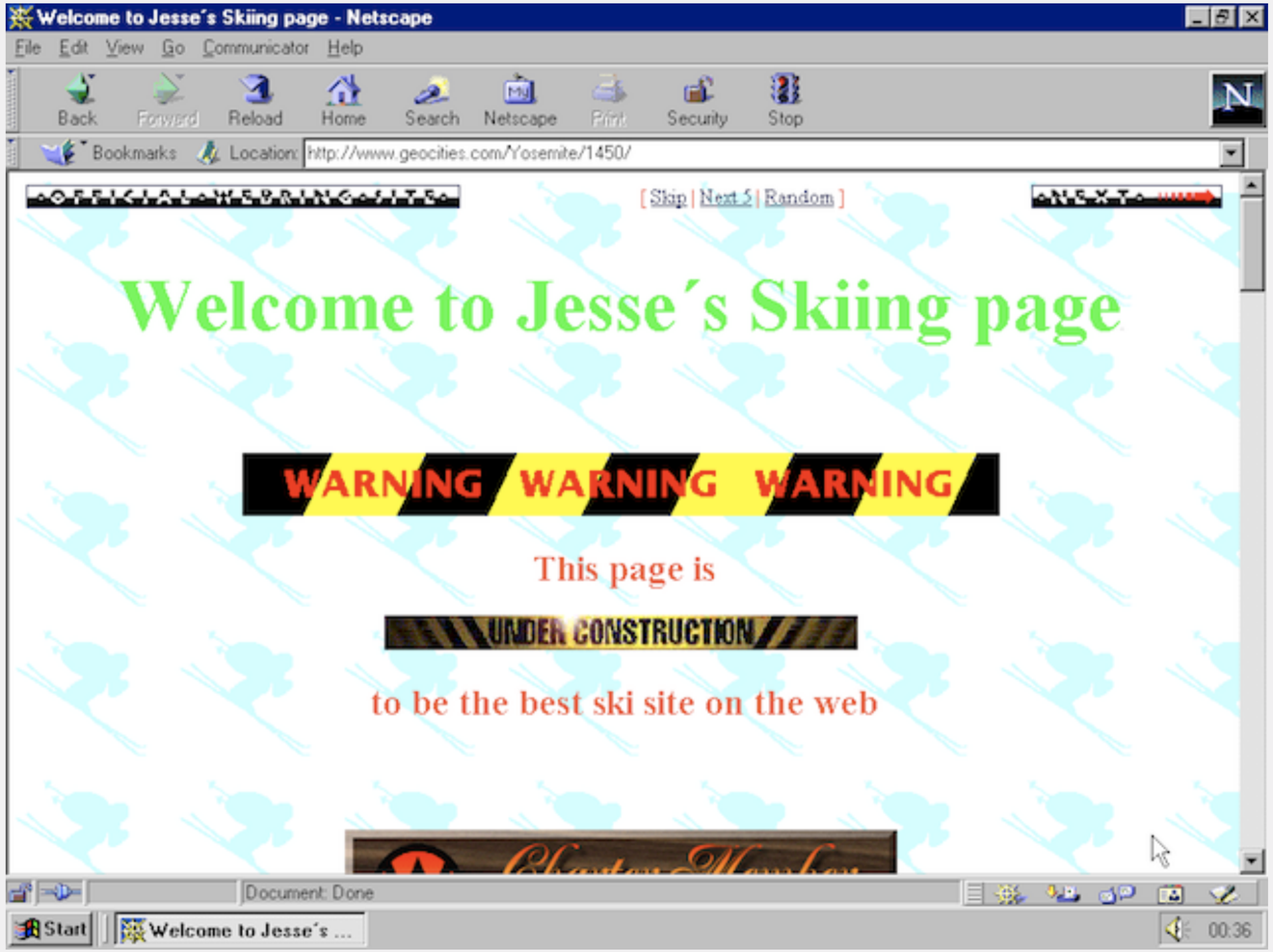
The principals of
TOMORROW

@joshtumath

Source: **Disneyland Resort**

Flow layout

The default layout method



Source: **https://oneterabyteofkilobyteage.tumblr.com/**

Table layout

Abusing the `table` element for layouts

@joshtumath

Source: **BBC**

Mobile and desktop websites

m.bbc.co.uk for mobiles

bbc.co.uk for desktops

Fluid and fixed layouts

Cleverly misusing CSS property `float: left` and percentages or fixed width boxes

Source: **BBC**

MAY 25, 2010

Responsive Web Design

by ETHAN MARCOTTE

Published in: CSS, Layout, User Interface Design | Discuss this article »

> *The control which designers know in the print medium, and often desire in the web medium, is simply a function of the limitation of the printed page. We should embrace the fact that the web doesn't have the same constraints, and design for this flexibility. But first, we must "accept the ebb and flow of things."*
>
> *John Allsopp, "A Dao of Web Design"*

The English architect Christopher Wren once quipped that his chosen field "aims for Eternity," and there's something appealing about that formula: Unlike the web, which often feels like aiming for next week, architecture is a discipline very much defined by its permanence. A building's foundation defines its footprint, which defines its frame, which shapes the facade. Each phase of the architectural process is more immutable, more unchanging than the last. Creative decisions quite literally shape a physical space, defining the way in which people

Snapshot

Learn how to use fluid grids, flexible images, and media queries to create elegant user experiences with responsive web design.

Ad via The Deck

JOB BOARD
Crispin Porter + Bogusky is looking for a Experience Designer.

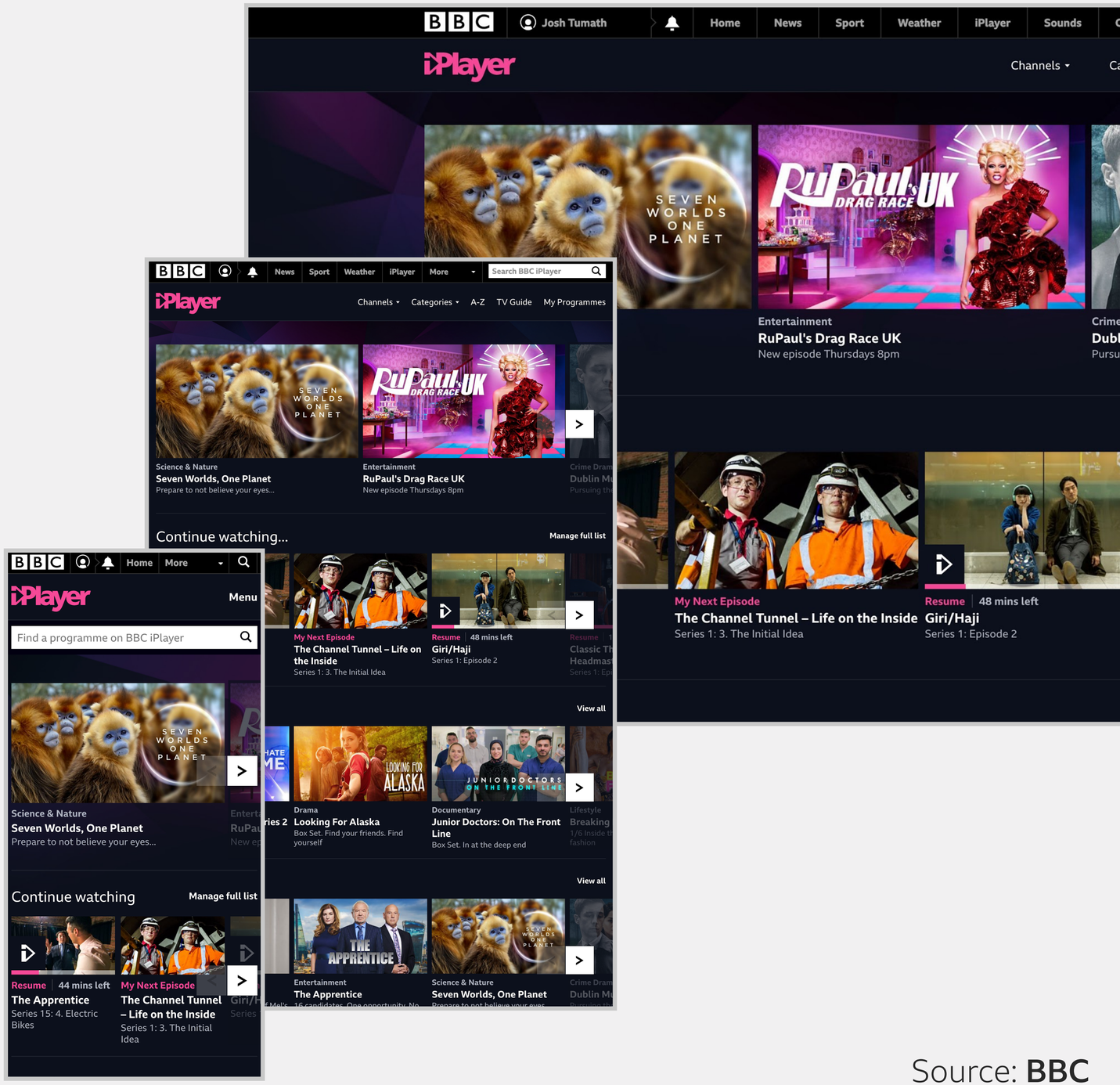
More on the Job Board.

A Book Apart

@joshtumath

Responsive layouts

The full power of CSS Media Queries



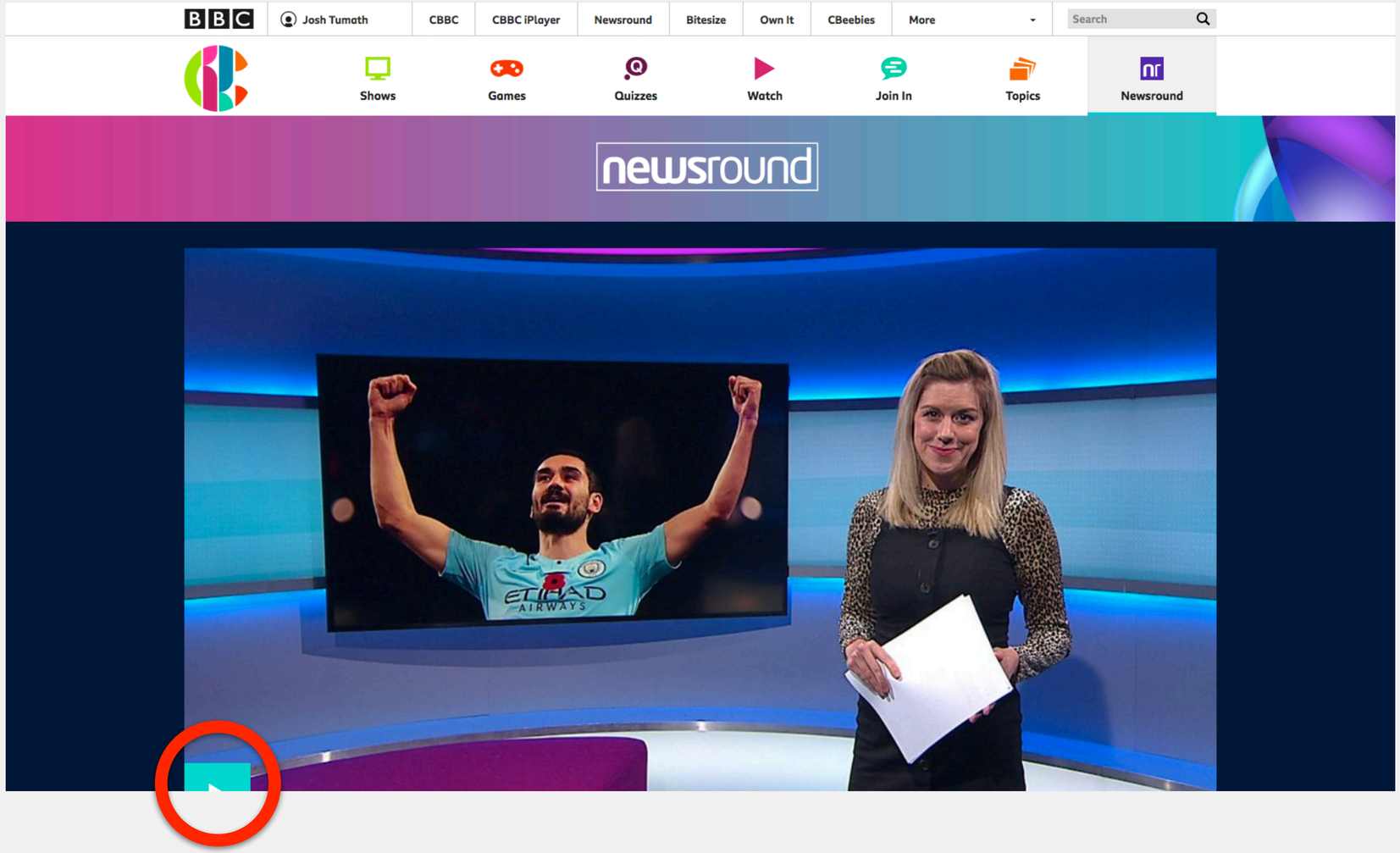
@joshtumath

Source: **BBC**

The limitations of **Responsive Web Design**

Where’s the fold?

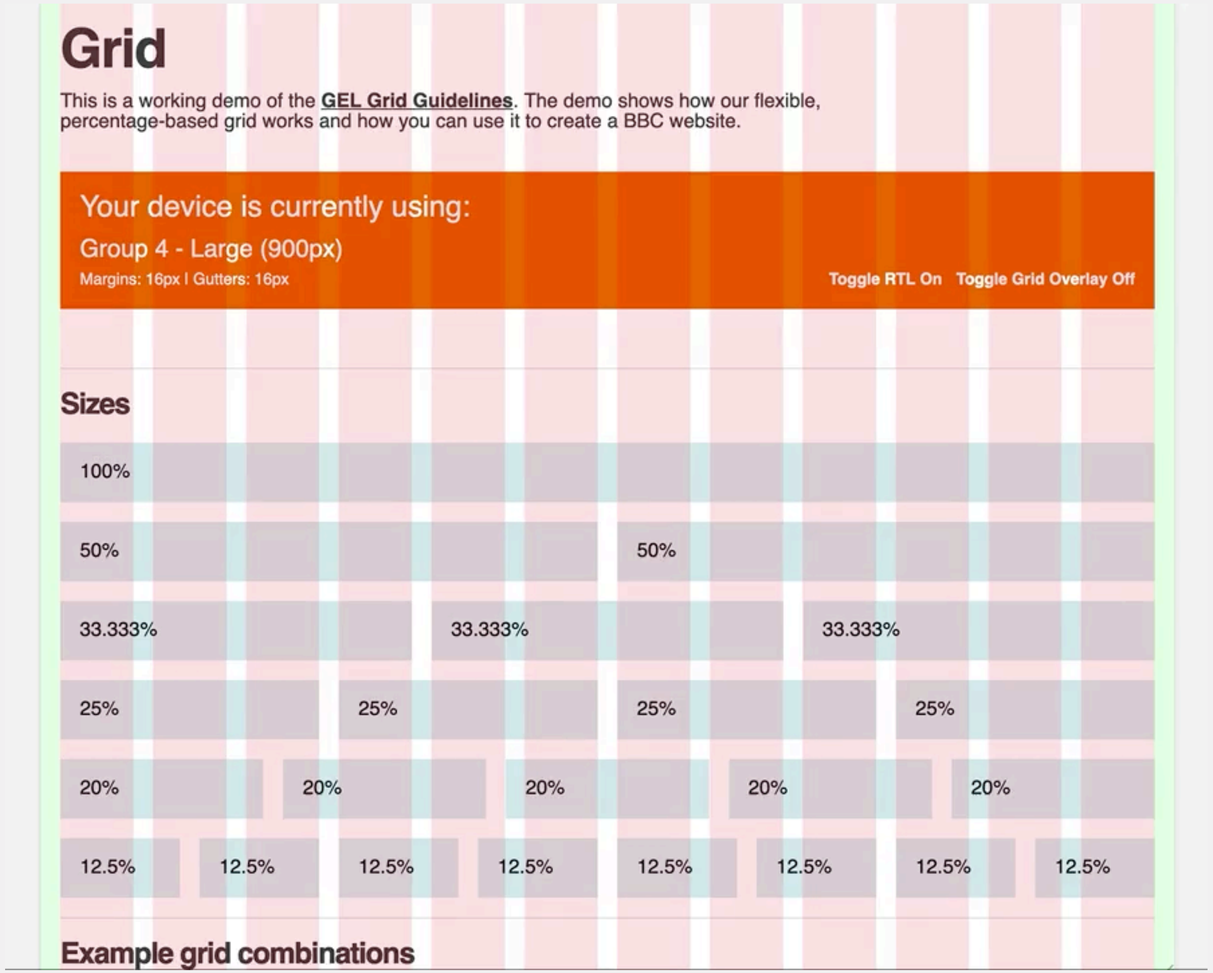
We can’t easily size things so that they don’t get cut off at the fold



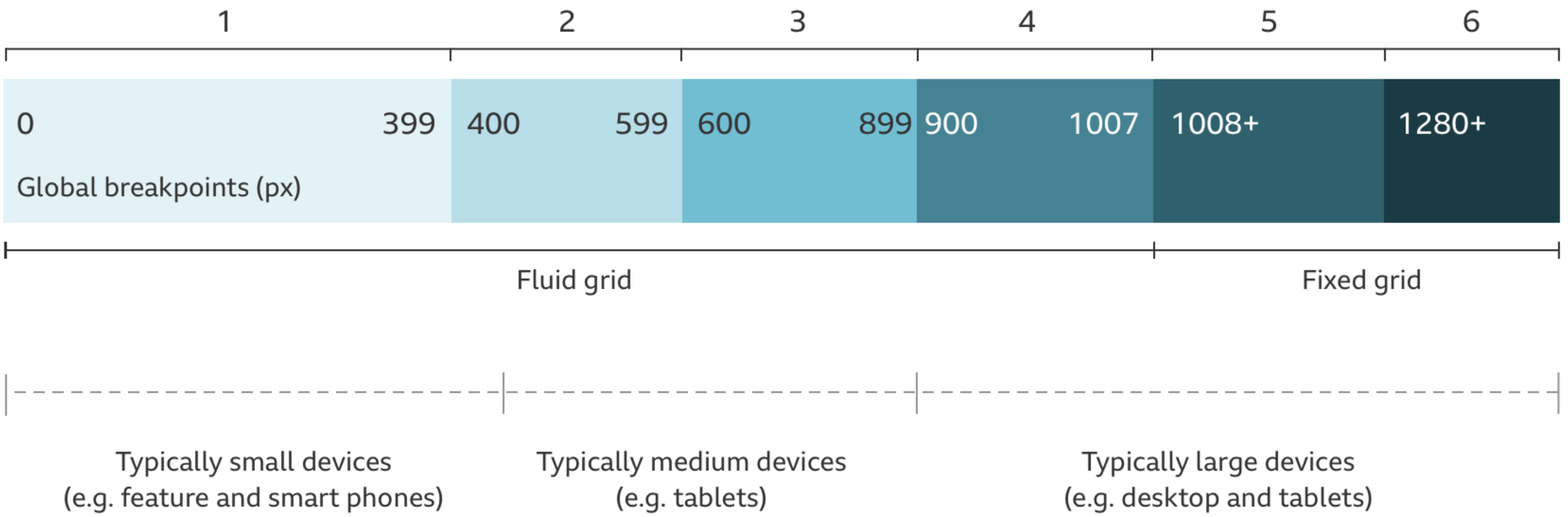
Source: **BBC**

Can’t mix fluid and fixed

All grid columns must be either fixed or percentage widths



Stick to the breakpoints



Source: **BBC**

@joshtumath

Source: **ProgressCityUSA**

It’s all about design systems

minmax(*n, m*)

Subgrids

Flex

fr *units*

Multi-column

@supports

min(*n, m*)
max(*n, m*)

aspect-ratio

New in CSS

min-content

Grids

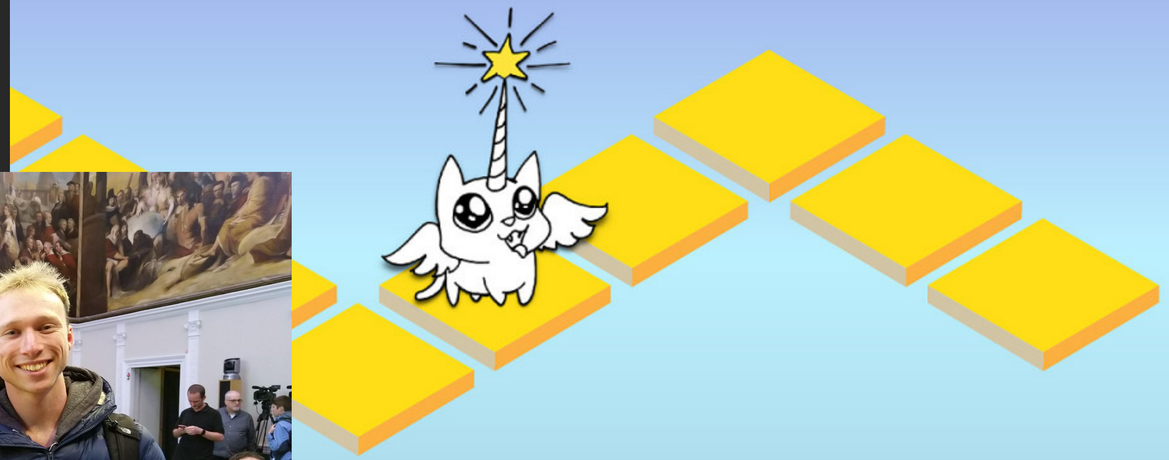
max-content

Shapes

Regions

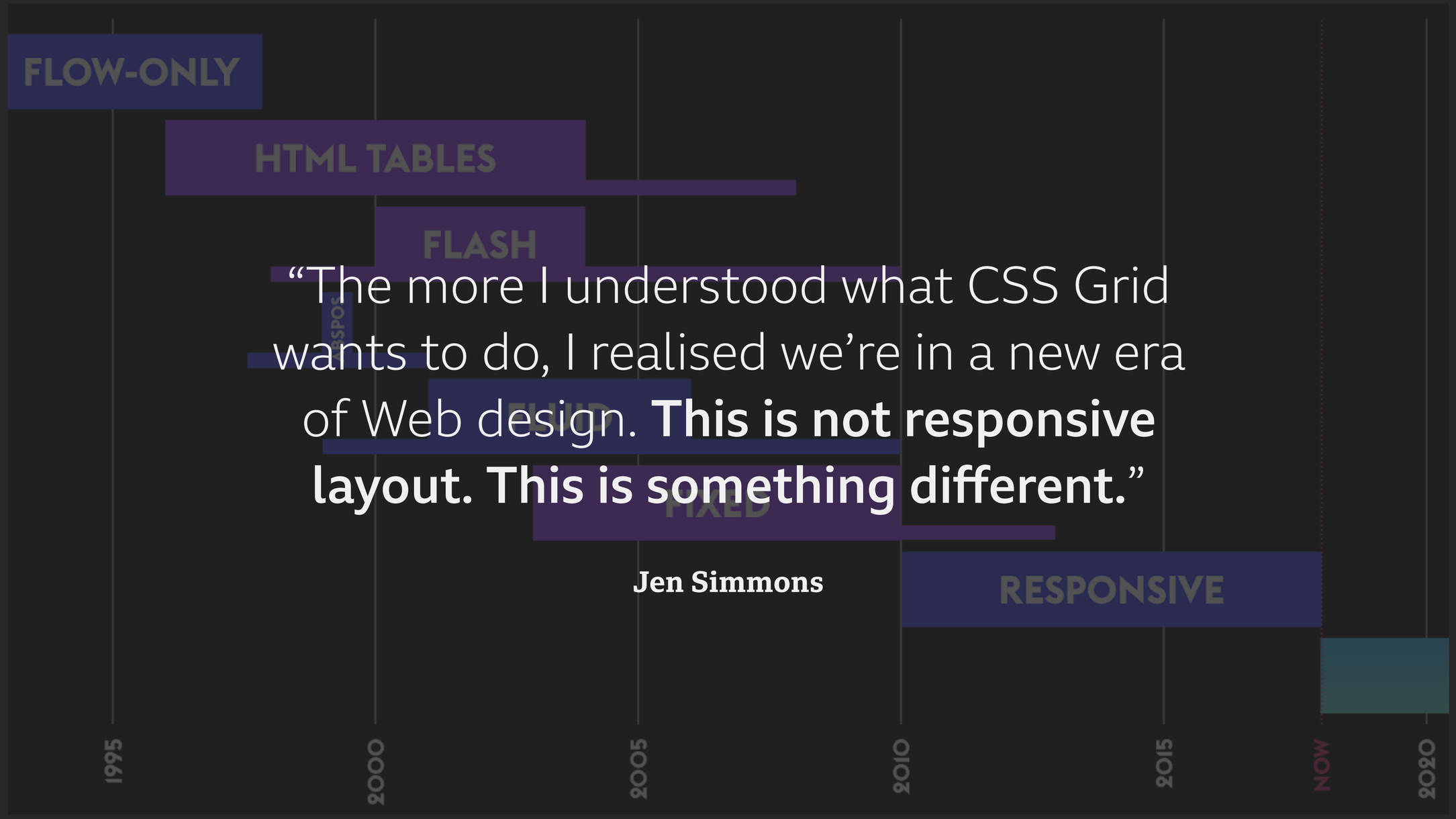
clamp(*min, value, max*)

Everything You Know About Web Design Just Changed



Jen Simmons
View Source London
October 2018

@joshtumath



"The more I understood what CSS Grid wants to do, I realised we're in a new era of Web design. **This is not responsive layout. This is something different.**"

Jen Simmons

Source: **Jen Simmons, 'Everything You Know About Web Design Just Changed' (2018)**

Intrinsic Web Design

@joshtumath

Intrinsic Web Design

@joshtumath

Intrinsic Web Design

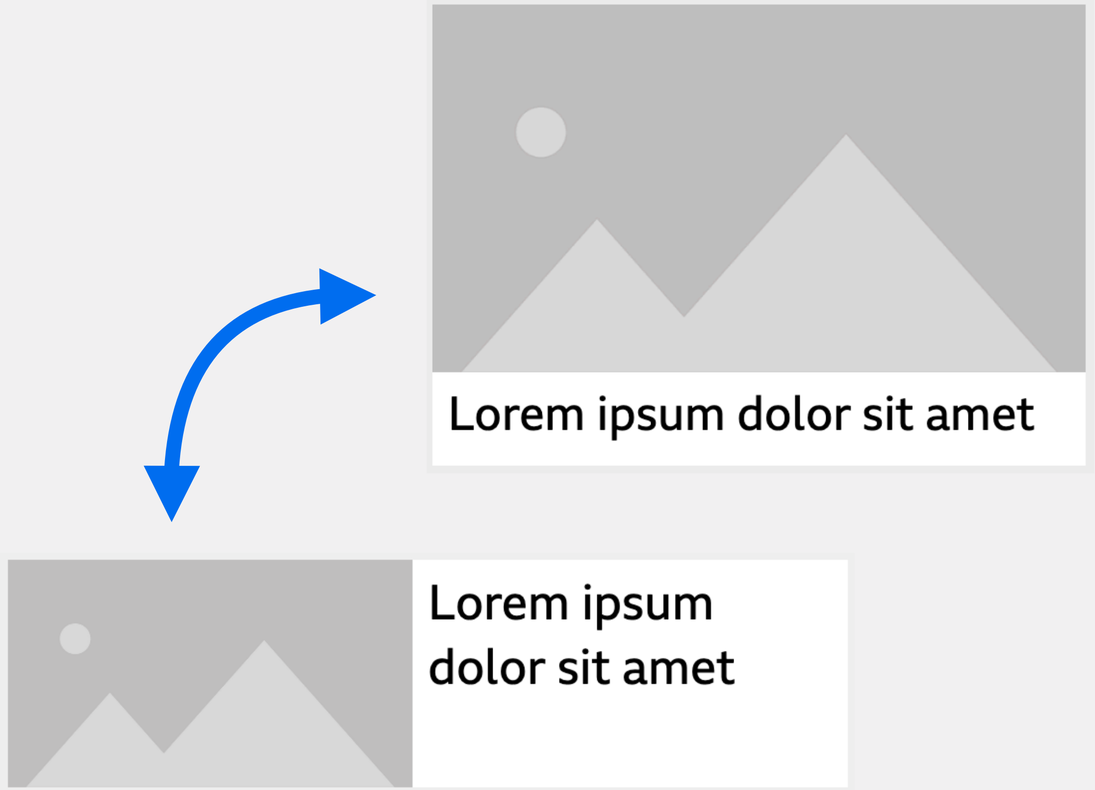
@joshtumath

Intrinsic Web Design

@joshtumath

Intrinsic?

- The content knows how to fill its space
- It’s about setting constraints instead of setting breakpoints
- Capable of mixing fixed and fluid columns in the same layout
- No need for Media Queries (usually)!



Hello World

Lorem ipsum dolor sit amet

Lorem ipsum dolor sit amet

Lorem ipsum dolor sit amet

Lorem ipsum dolor sit amet

Lorem ipsum dolor sit amet

Lorem ipsum dolor sit amet

Sidebar

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

This changes everything

And as designers and developers,
we need to understand what we can do.

EVERY LAYOUT

RUDIMENTS

- Boxes
- Composition
- Units
- Global and local styling
- Modular scale
- Axioms

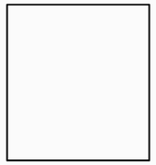
LAYOUTS

- Picture index
- The Stack
- The Box
- The Center
- The Cluster
- The Sidebar
- The Switcher
- The Cover
- The Grid
- The Frame
- The Reel
- The Imposter

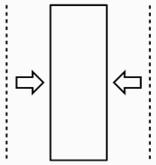
Layouts

Each of the following *layout primitives* is documented with a code generator, and includes a custom element implementation. You can use them together, in composition, to create robust and responsive layouts without the need for `@media` breakpoints.

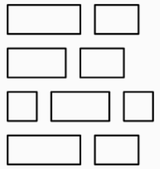
The Stack



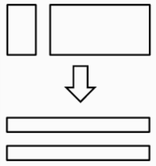
The Box



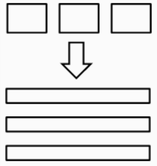
The Center



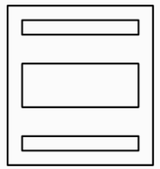
The Cluster



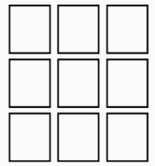
The Sidebar



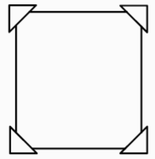
The Switcher



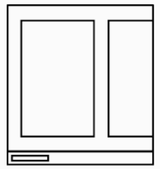
The Cover



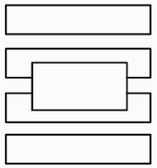
The Grid



The Frame



The Reel



The Imposter

Every Layout is created by
Heydon Pickering & Andy Bell
Privacy Policy - Terms and conditions

Intrinsic Web Design + Design Systems = ❤️

So how are we using it at the BBC?

We’re not

*but we’re thinking about it

NEWS

This Country: 'Everyone knows a Kerry and Kurtan'

Daisy May and Charlie Cooper are the sibling duo behind the award-winning BBC Three comedy, This Country.

They sat down with Radio 1 Newsbeat to chat about what to expect from This Country's third series, which will air early next year. A new book, published earlier this month, will keep fans going until then.

Aside from dropping an accidental spoiler, they also opened up about what it was really like growing up in a small village, why the show has attracted such a devoted following, and why Daisy would rather wear bin bags to the Baftas.

Interview by Annabel Rackham and filming by Imran Rahman-Jones

Top Videos

Billie Eilish on Bond and online bullying

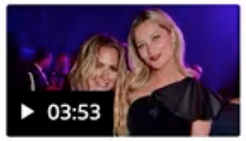
4h ago | BBC News

This Country: 'Everyone knows a Kerry and Kurtan'

20 October 2019 | BBC News

Love Island tribute to Caroline Flack

17 Feb 2020 | BBC News

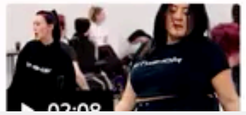


Caroline Flack: Laura Whitmore's emotional tribute

3 days ago | BBC News

Photography exhibit asks people to challenge victim blaming

14 Feb 2020 | BBC News



Winchester friends set up wheelchair dance class

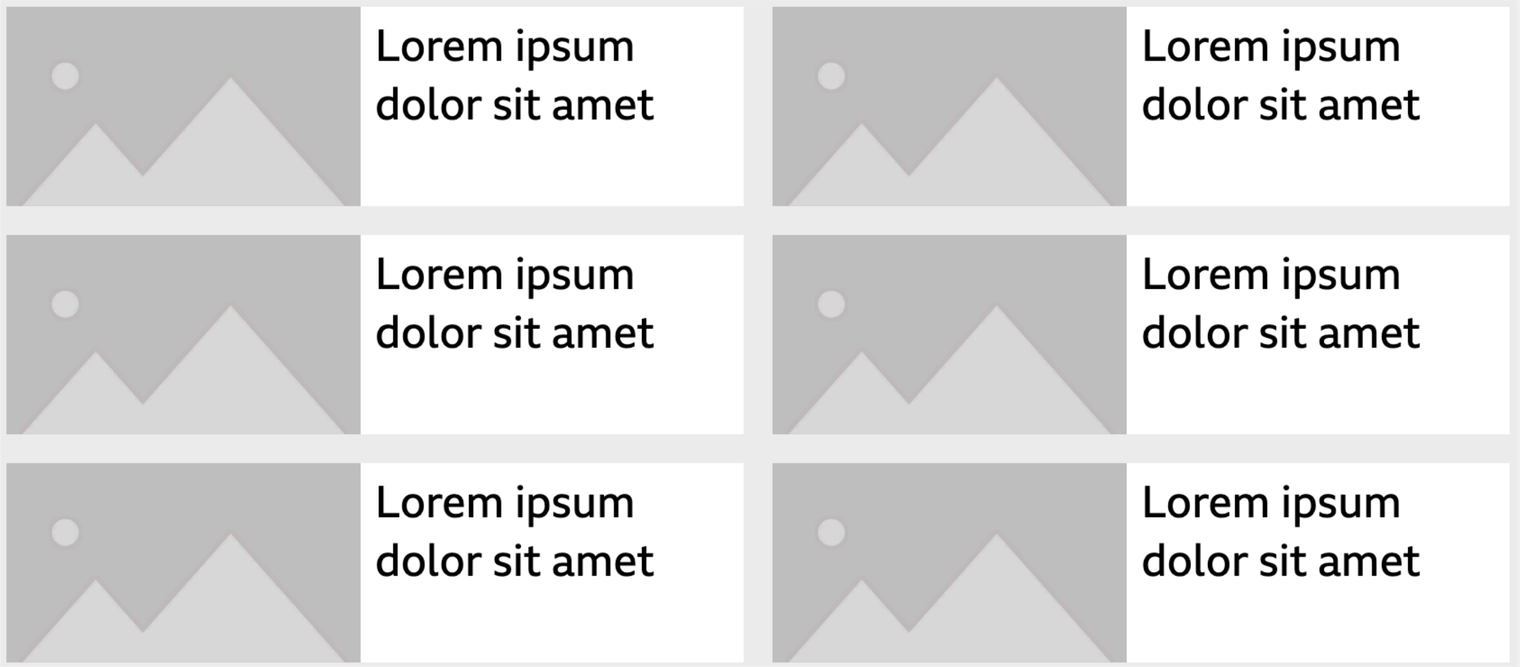
@joshtumath

The principals of **TOMORROW**

How to put intrinsic layouts in your design system

@joshtumath

Source: **TheOriginalEpcot**

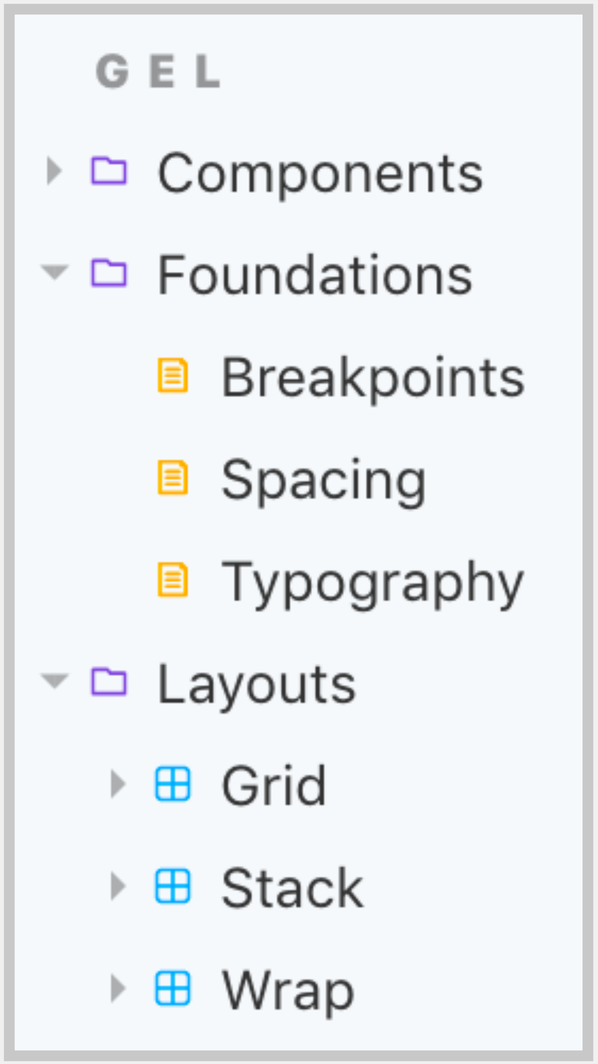



```
.grid {
  display: grid;
  gap: 1rem;
  grid-template-columns: repeat(auto-fit, minmax(500px, 1fr));
}
```

Avoid Media Queries

Split layouts from components

You can avoid re-implementing layouts in each component

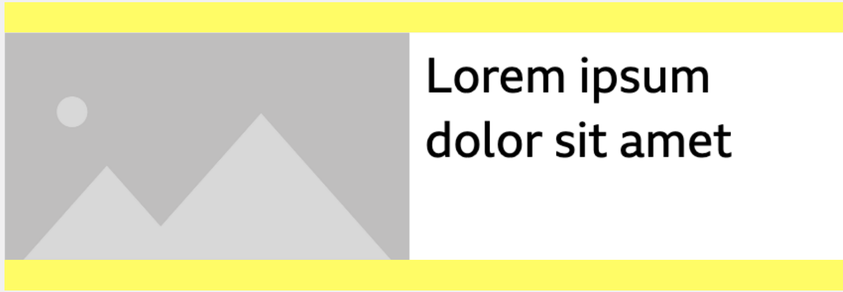


Don’t set margins on the edges of components

Let the parent components do that instead

👎

```
.card {
  margin: 1rem 0;
}
```



👍

```
.stack > * + * {
  margin-top: 1rem;
}

.grid {
  display: grid;
  gap: 1rem;
}
```

Encapsulate the styles of each component

Don't let parent components change the style of a component

```
<Card>
  <div class="card-image">
    <Image />
  </div>
  <div class="card-content">
    <p>Lorem ipsum</p>
  <div>
</Card>
```

👎

```
.Card .Image {
  width: 50%;
}
```

Be careful mixing intrinsic layouts with media queries

So what do we need to do?

- Spread the word to everyone you know!
- Play around with CSS Grid and Flexbox
- Subscribe to Rachel Andrew, Jen Simmons and Adam Argyle
- See what you can do today

Thank you

@joshtumath

https://joshtumath.uk

Source: **Walt Disney Imagineering**